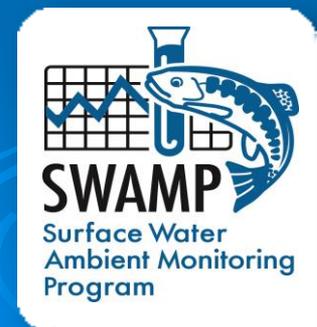


California

Harmful Algal Blooms (HABs): 2016 Lessons Learned and future prospects

Beverley Anderson-Abbs
Environmental Scientist,
Senior Specialist
Office of Information
Management and Analysis



Toxic Algae Blooms Spurred By Fertilizer Runoff Plague California

August 12, 2016 6:33 PM

Filed Under: algae blooms, California, Central Valley, Discovery Bay, Fertilizer Runoff, nitrogen, phosphorus, Plague, Russian River, Spurred, Toxic



Algae bloom in Russian River. (CBS)

Above: Blue green algae at Discovery Bay. (Lesley McClurg/KQED)

Toxic Muck: California's Algae Problem Is Worse Than Ever

HEALTH & FITNESS

WATER TESTS POSITIVE FOR TOXIC BLUE GREEN ALGAE IN DISCOVERY BAY

[Share](#) [G+](#) [Tweet](#) [Email](#)



EMBED </> MORE NEWS VIDEOS ▶

Dangerous algae continues to be a problem across the country. And here in the Bay Area, hot weather is contributing to a toxic algae bloom in the water throughout Discovery Bay in far eastern Contra Costa County. (KGO-TV)

Californians Urged To Avoid Harmful Algae-Plagued Waterways Through Labor Day

August 25, 2016 1:19 PM

Filed Under: algae blooms, Blue-green algae, California, Freshwater

WATER & DROUGHT

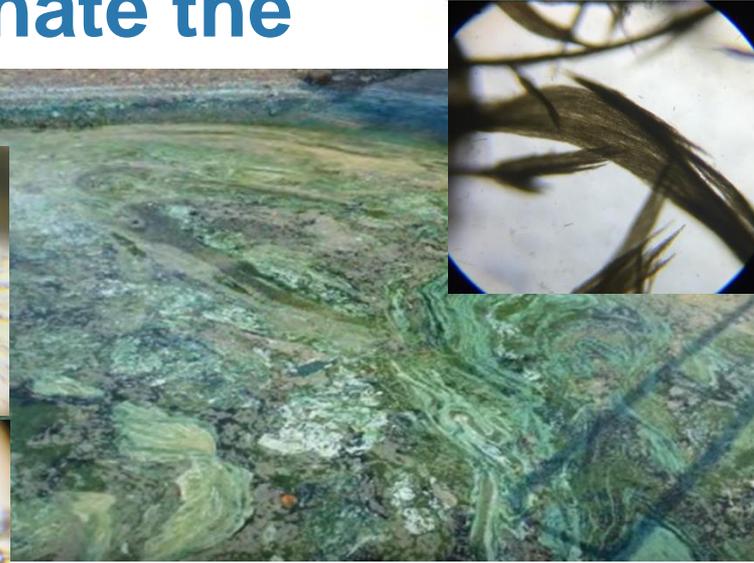
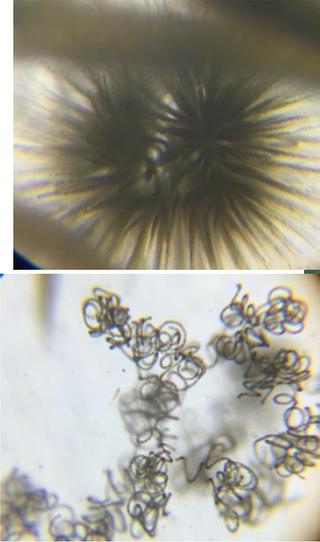
AUGUST 12, 2016 6:00 AM

California's summer of slime: Algae blooms muck up waterways across state

Different genera predominate the blooms in different lakes



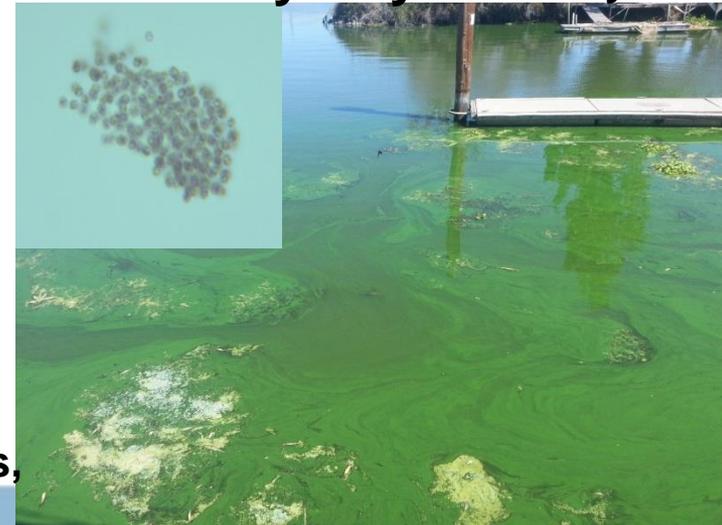
Lake Shasta - Dolichospermum



Lake Britton-Aphanizomenon, Dolichospermum, Gloeotrichea



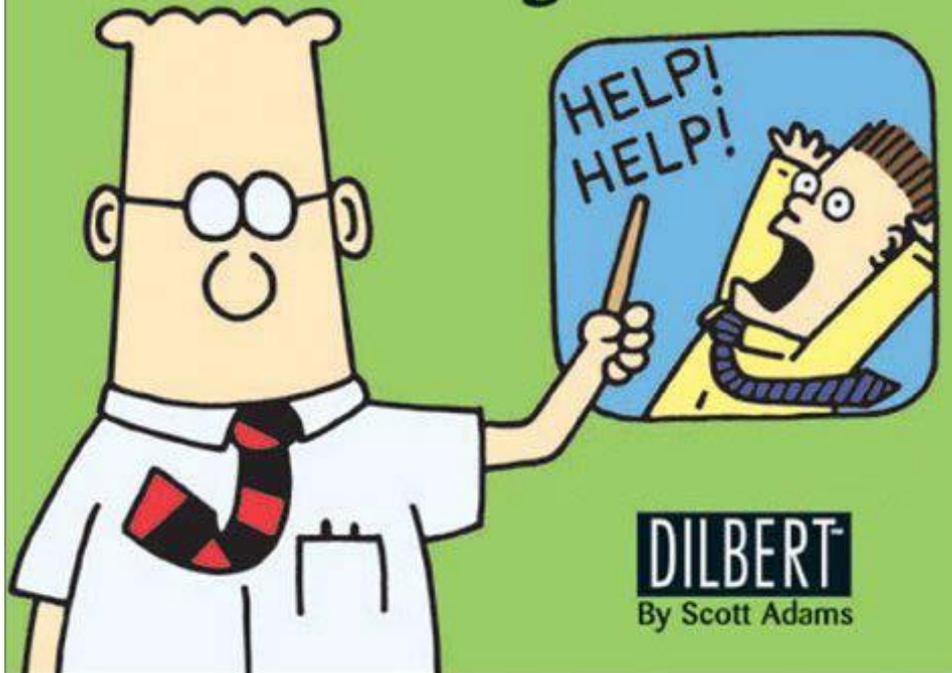
Discovery Bay - Microcystis



Lake Elsinor - Aphanocapsa, Aphanizomenon, Arthrospira, Chroococcus, Cylindrospermopsis, Limnothrix, Merismopedia, Microcystis, Planktolyngbya, Planktothrix

Lessons Learned from 2016 events

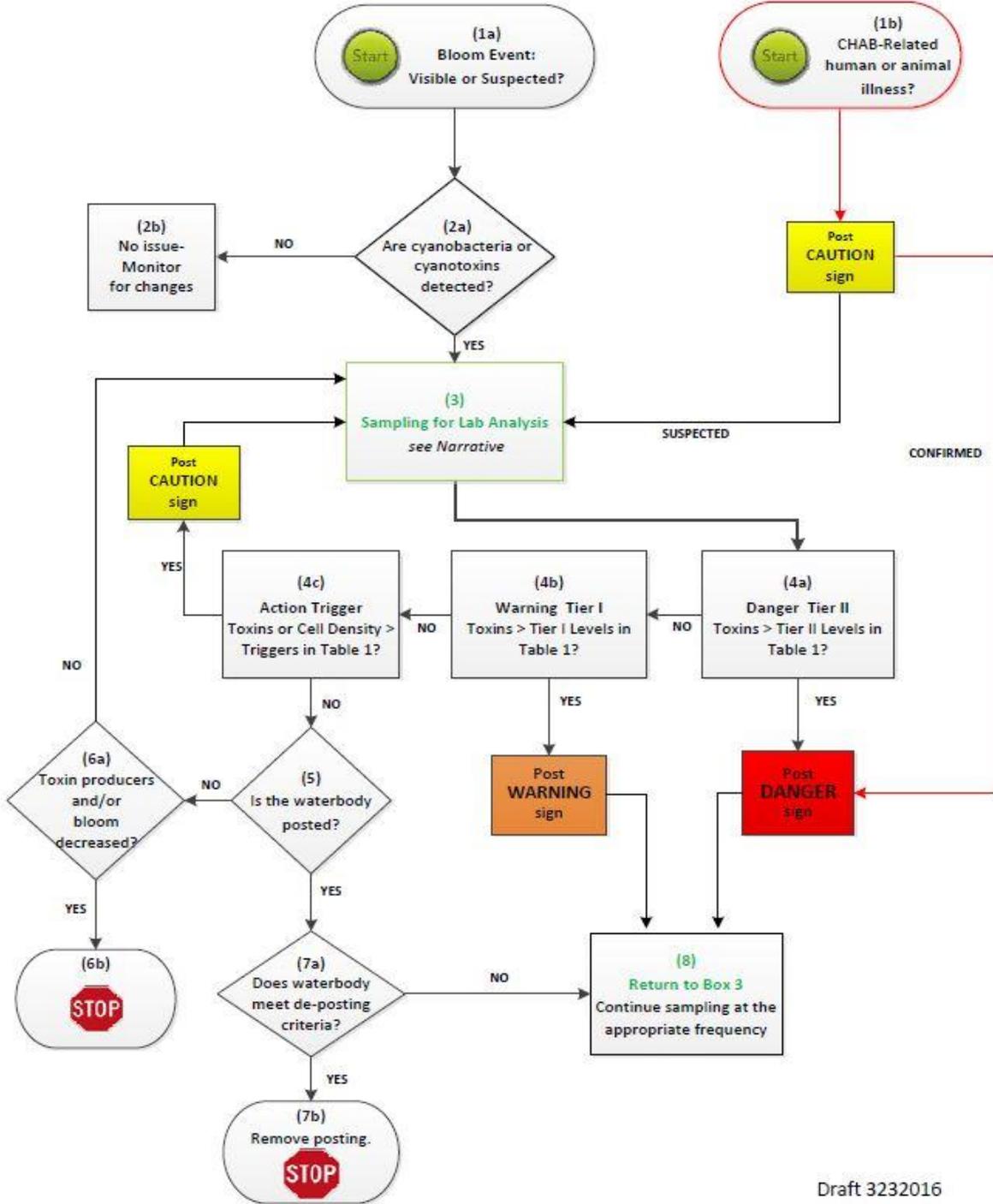
Our Disaster Recovery Plan Goes Something Like This...



Lesson #1

Blooms always happen on the Friday just before the long weekend, or just before a vacation.

Need contingency plans for staffing, extra sampling, etc.



Lesson #2:
It is difficult to do this during a crisis

2016 CCHAB
Response decision tree and narrative



Lesson #3

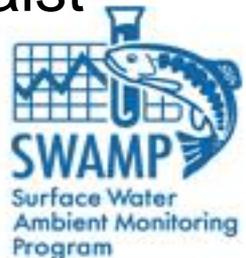
You need to “Control” the Message

Blue-green algae could make California’s lakes too dangerous for swimming.

Toxic muck: California’s Algae problem worse than ever

Toxic blue-green algae forming in waterways

...regrets jumping in the water in mid-July. He ended up in the hospital because his body went numb from the waist down



CCHAB recommends ELISA

Make sure you have appropriate collection bottles (amber glass)

Take Standard WQ measurements (pH, DO, temp, SC)

Use SWAMP HABs field sheets

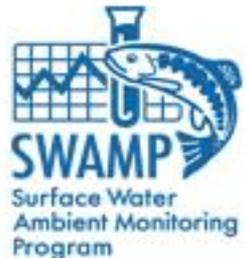
Take photos

Identify types of cyano present

Lesson #4: You need standard methods before the event

Appropriate to the question

Know what the methods are measuring



Lesson #5:

Blooms can change very quickly

**We need to take advantage
of modern monitoring methods**



Lessons Learned Workshop

Reporting Form and Portal

Coordination and Communication

Sampling and Laboratory Procedures

Communicating with the Public



Lessons Learned Workshop

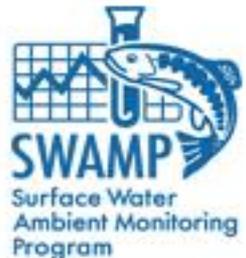
Reporting Form and Portal

- simplifying form for public use
- simplifying follow up reports

Coordination and Communication

Sampling and Laboratory Procedures

Communicating with the Public



Lessons Learned Workshop

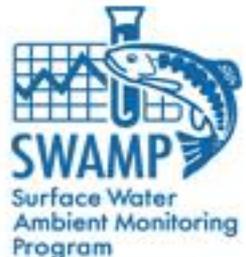
Reporting Form and Portal

Coordination and Communication

- continue OIMA support**
- targeted outreach with fact sheets**
- continued CCHAB coordination**

Sampling and Laboratory Procedures

Communicating with the Public



Lessons Learned Workshop

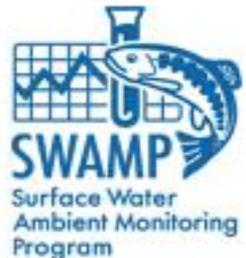
Reporting Form and Portal

Coordination and Communication

Sampling and Laboratory Procedures

- provide field sampling SOPs
- provide toxin interpretation

Communicating with the Public



Lessons Learned Workshop

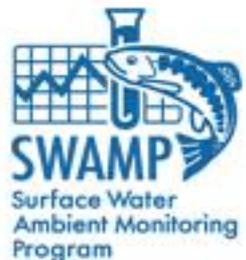
Reporting Form and Portal

Coordination and Communication

Sampling and Laboratory Procedures

Communicating with the Public

- update press release templates**
- consider use of social media**



CAUTION

Harmful algae may be present in this water.
For your family's safety:



You can swim in this water, but **stay away from algae and scum** in the water.



Do not let pets and other animals go into or drink the water, or eat scum on the shore.



Keep children away from algae in the water or on the shore.



Do not drink this water or use it for cooking.



For fish caught here, **throw away guts and clean fillets** with tap water or bottled water before cooking.



Do not eat shellfish from this water.

Call your doctor or veterinarian if you or your pet get sick after going in the water.

For information on harmful algae, go to mywaterquality.ca.gov/monitoring_council/cyanohab_network
For local information, contact: